

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
15 September 2005 (15.09.2005)

PCT

(10) International Publication Number  
**WO 2005/085453 A3**

(51) International Patent Classification:

C12N 15/82 (2006.01) A01H 5/10 (2006.01)  
A01H 5/00 (2006.01)

(21) International Application Number:

PCT/GB2005/000857

(22) International Filing Date: 7 March 2005 (07.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

0405093.6	5 March 2004 (05.03.2004)	GB
0406275.8	19 March 2004 (19.03.2004)	GB
0406729.4	25 March 2004 (25.03.2004)	GB

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:

20 April 2006

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SEEDS

(57) Abstract: This invention relates to a method for modifying cell proliferation in a plant which comprises the step of transforming a plant, or plant propagating material, with a nucleic acid molecule comprising at least one regulatory sequence capable of directing expression within the integuments and/or seed coat and at least one nucleic acid sequence whose expression or transcription product is capable of directly or indirectly modulating cell proliferation, whereby on expression of that nucleic acid sequence cell proliferation is modified. The invention also relates to a plant which includes a nucleic acid molecule comprising at least one regulatory sequence capable of directing expression within integuments and/or seed coat and at least one nucleic acid sequence whose expression or transcription product is capable of directly or indirectly modulated cell proliferation, whereby on expression of that nucleic acid sequence cell proliferation is modified. The invention also relates to reproducible plant material including a nucleic acid molecule comprising at least one regulatory sequence capable of directing expression within integuments and/or seed coat and at least one nucleic acid sequence whose expression or transcription product is capable of directly or indirectly modulated cell proliferation, whereby expression of that nucleic acid sequence cell proliferation is modified. According to another aspect of the invention, there is provided a method for modifying cell proliferation in a plant which comprises the step of modulating the response of the plant to an auxin in which cell proliferation is modified to produce larger or smaller seeds than wild-type.



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